

# Work Order ID 87890

**\*87890\***

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July-17-12 2:50:36 PM

Item ID: D3836-041 Accept **\*N900040100\*** Setup Start **\*NS1\***  
 Revision ID: Stop **\*NS2\***  
 Item Name: Rib Assembly (Basket Lid, LH)  
 Start Date: 7/17/12 Start Qty: 2.00 **\*2\*** Cust Item ID:  
 Required Date: 7/17/12 Req'd Qty: 2.00 **\*2\*** Customer:  
 Reference: ECN12-603 REWORK

Approvals: Process Plan: [Signature] Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D3836	Rev A

100 0.00  
**\*100\*** Large Fab  
 Large Fab  
 Large Fab

**Memo**  
 PULL FROM STOCK:  
 2 X D3836-041 B77515  
 REWORK PER DRWG D3836 REV.B  
 PER ECN 12-60  
 - drill hole and open to finish size as per dwg D3836 REV.B  
 - weld D3759-1r bushing as per dwg D3836 REV. B  
 A/R ER316 S.S. Rod Batch: M/21602  
 - grind weld flush where indicated on dwg

SH/CC 12-7-17

Pto  
[Signature]

130 0.00  
**\*130\*** QC9- Inspect visual per QSI004- Fusion Welds  
 QC10 **Memo**  
 Quality Control

0.00  
 DAS 16  
 17/12/20

NCR: ☒ Yes ☐ No

## WORK ORDER NON-CONFORMANCE / UPDATE

DQA: [Signature] Date: 12/07/27QA Closed: [Signature] Date: 12/7/27

Work Order: <u>87890</u>	<b>DISPOSITION</b> Rework <input checked="" type="checkbox"/> Scrap <input checked="" type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>			
Part No. <u>36-041</u>		Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input checked="" type="checkbox"/>
NCR No. <u>12-1622</u>		Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input checked="" type="checkbox"/>	Quality <input type="checkbox"/>
		Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>
		Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data <input checked="" type="checkbox"/>				FOUND After welding first- the wrong bushings were coded upon Aug. Should be D4021-S not D3755-1. Re Drawing was wrong and not checked correctly	12/07/19 QS1042	Drill out + Remove D3755-1 and scrap all pc.	PAC 12-7-20	SH 12-07-24	DAS 16 2-85 12/07/19
Equip/Tooling <input type="checkbox"/>						Re weld to <del>Q57004</del> D4021-S in it location FR 314 SS B# <u>M121602</u> D4021-S B <u>84717</u>		SH 12-07-24	
Operator <input type="checkbox"/>									
Material <input type="checkbox"/>									
Setup <input type="checkbox"/>									
Other <input type="checkbox"/>									
Process <input type="checkbox"/>									
Supplier <input type="checkbox"/>									
Training <input type="checkbox"/>									
Unapproved <input type="checkbox"/>									

## FAULT CATEGORY

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input checked="" type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input checked="" type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
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# Work Order ID 87890

\*87890\*

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July-17-12 2:50:36 PM

Item ID: D3836-041 Accept \*N900040100\* Setup Start \*NS1\*  
 Revision ID: Stop \*NS2\*  
 Item Name: Rib Assembly (Basket Lid, LH)  
 Start Date: 7/17/12 Start Qty: 2.00 \*2\* Cust Item ID:  
 Required Date: 7/17/12 Req'd Qty: 2.00 \*2\* Customer:  
 Reference: ECN12-603 REWORK

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start \*NR1\*  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140 *140* QC Quality Control	QC5- Inspect part completeness to step on W/O  Memo	0.00 0.00		16 17/07/12		(1x)		12.07.20	
150 *150* Packaging Packaging	Identify as per dwg & Stock Location: _____  Memo RE-IDENTIFY USING NEW B/N	0.00 0.00				(1x)		12.07.20	
160 *160* QC Quality Control	QC21- Final Inspection - Work Order Release  Memo	0.00 0.00						12/17/24	MF 12-07-24

# Picklist Print

July-17-12 2:50:35 PM

Page 1

Work Order ID: 87890

Parent Item: D3836-041

Parent Item Name: Rib Assembly (Basket Lid, LH)

Start Date: 7/17/12

Required Date: 7/17/12

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:A 08-12-01 new issue DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3759-1 Bushing		Manufactured	No				Each	142.0000					

CC<sup>2</sup>/CC 12-7-17

Location	Loc Qty	Loc Code
WA	140	
79213	1	
83464	139	
WA005	2	
66489	1	
82785	1	

2x

D3836-041  
Rib Assembly (Basket Lid, LH)

Manufactured No

Each 0.0000

B77515 → ① · CC 12-7-17

D4021-9 → ② →

B84717

CC 12-7-20

8 7 6 5 4 3 2 1

ITEM	QTY -041	QTY -042	P/N	DESCRIPTION
1	X		D3836-041	RIB ASSY (BASKET LID, LH)
2		X	D3836-042	RIB ASSY (BASKET LID, RH)
3	1	1	D2327-3	SPACER BUSHING
4	2	2	<del>D3836-1</del>	BUSHING <i>D402m</i>
5	1		D3836-1	RIB <i>6120m</i>
6		1	D3836-2	RIB
7	1	1	D3836-3	RIB

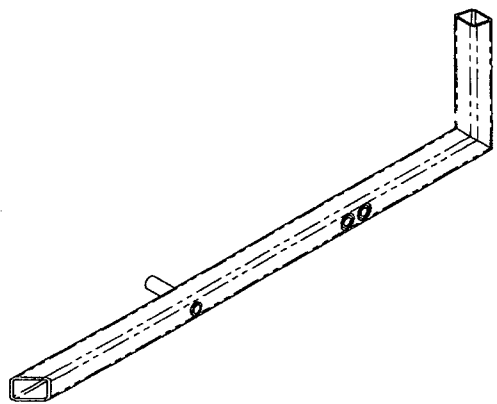
△B

D

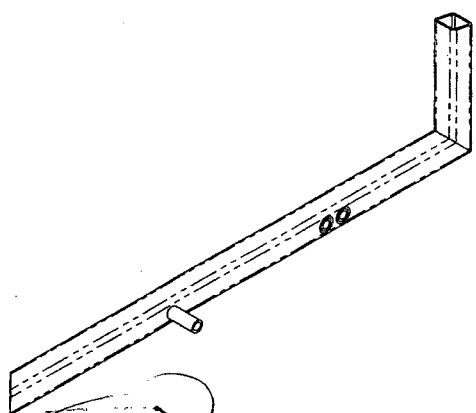
C

B

A



D3836-042 RIB ASSY (BASKET LID, RH)



D3836-041 RIB ASSY (BASKET LID, LH)

RELEASED  
2012-07-16  
*WMP*

*87890  
(-77515)*

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 1.01 lbs EACH
- 8) WELD PER DART QSI 004

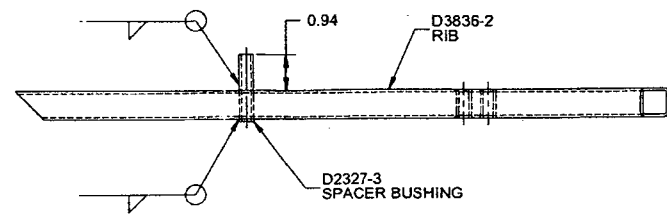
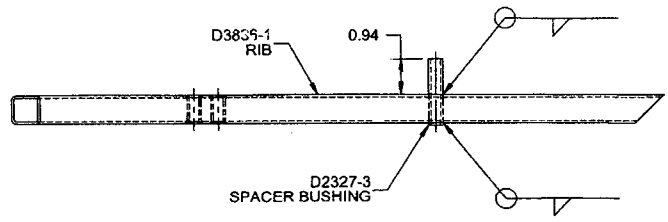
B	ADD QTY(2) D3759-1 BUSHING TO D3836-041/042 (ZN D3-1, C6-2, C3-2, C6-3, C5-3, B6-3, B5-3) REASON: PAR10-50.	MB	12.05.11
A	NEW ISSUE	MB	08.09.24
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	12.05.11		

DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWING NO. D3836	REV. B SHEET 1 OF 3
TITLE RIB ASSY (BASKET LID)	SCALE NTS
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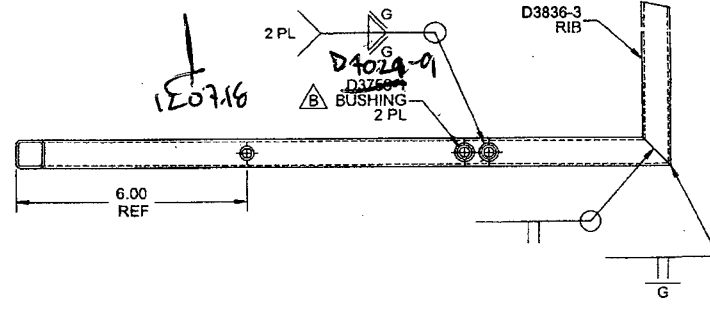
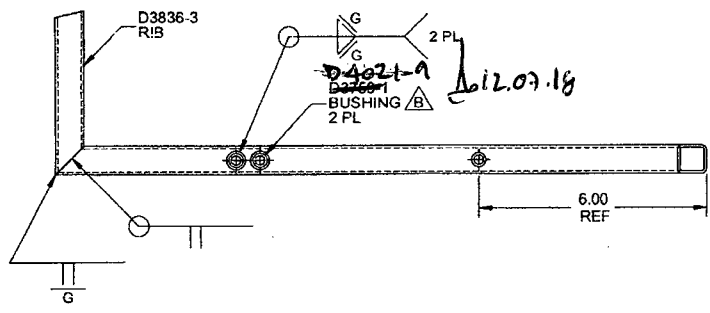
D

D



C

C



B

B

**D3836-041 RIB ASSY (BASKET LID, LH)**

**D3836-042 RIB ASSY (BASKET LID, RH)**

RELEASED  
2012-07-16

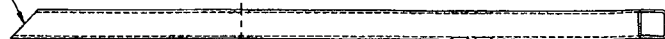
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A

DESIGN		<b>DART AEROSPACE LTD</b>
DRAWN		HAWKESBURY, ONTARIO, CANADA
CHECKED		DRAWING NO. <b>D3836</b> REV. B
MFG. APPR.		SHEET 2 OF 3
APPROVED		TITLE <b>RIB ASSY (BASKET LID)</b> SCALE NTS
DE APPR.		
DATE	12.05.11	

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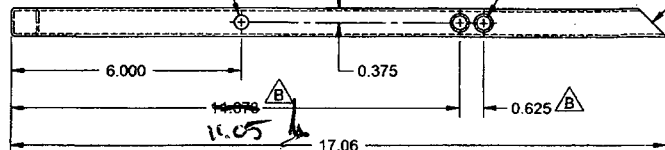
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CHAMFER



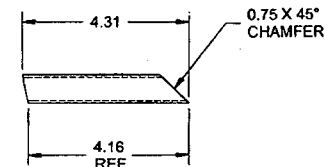
$\varnothing 0.375^{+0.020}_{-0.000}$  THRU

$\varnothing 0.375^{+0.020}_{-0.000}$  THRU  
 $\varnothing 0.49 \times 100^\circ$  CSINK  
2 PL, ON BOTH SIDES

0.75 X 45°  
CHAMFER

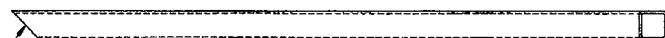


**D3836-1 RIB**



**D3836-3 RIB**

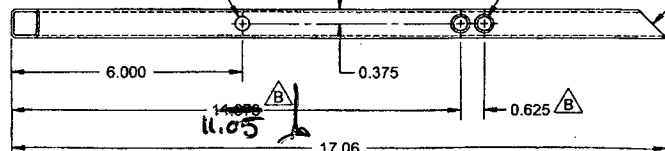
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CHAMFER



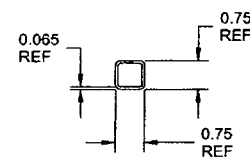
$\varnothing 0.375^{+0.020}_{-0.000}$  THRU

$\varnothing 0.375^{+0.020}_{-0.000}$  THRU  
 $\varnothing 0.49 \times 100^\circ$  CSINK  
2 PL, ON BOTH SIDES

0.75 X 45°  
CHAMFER



**D3836-2 RIB**



**TYPICAL SECTION  
VIEW**

**RELEASED**  
2012-07-16

**NOTES:**

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SQUARE TUBE, 0.75 X 0.75 X 0.065 WALL  
REF. DART SPEC. M304TS0.750W0.065
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: D3836-1/-2 = 0.77 lbs EACH; D3836-3 = 0.19 lbs

DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D3836	SHEET 3 OF 3
APPROVED		TITLE	SCALE
DE APPR.		RIB ASSY (BASKET LID)	NTS
DATE	12.05.11	<small>COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS UNCLASSIFIED AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR IN CONNECTION WITH ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

# ENGINEERING CHANGE NOTICE

## DART AEROSPACE LTD

Date: 12.07.11	Job No.: ENG3105	ADR Yes/No: Y	ADR Date: 12.05.11	ECN #: 12- 603
Product No.: D350-607-041/-043/-045/-047	Created By: [Signature]	Approved By: [Signature]		
Product Name: HELI-UTILITY-BASKET	Checked By: [Signature]			

Distribution	Reqd	Resp	Initial / Date
Production Manager / Coord.	Y	LL/MF	
Purchasing Coord.	N		
Production Engineering Coord.	Y	DD	
		EC	
		JLM	

Distribution	Reqd	Resp	Initial / Date
DQA / QA Coord.	Y	PS	
QC Coordinator	Y	ED	
Customer Technical Support	N		
Marketing	N		
Customer Order Processing	N		

### Reason for Change:

CONTINUOUS IMPROVEMENT BASED ON PAR 10-50.

### Documents Affected:

RELEASE D2512 REV. F, D3265, D3267 REV. D, D3266, REV. C, D3825, D3832, D3833, D3836 REV. B

PAPERWORK UPDATE ☐

PARTS MUST COMPLY ☒

PREVIOUS PARTS SATISFACTORY ☐

#	Quality Assurance Actions	Reqd	Resp	Notes	Complete
1	Notify Previous Customers	N			
2	Notify Eurocopter France	N			
3					

#	Engineering Actions	Reqd	Resp	Notes	Complete
4	Required Documents/Drawings Under Review	N			
5	Update Master Document List (MDL)	Y	MB	MDL-D350-607 REV. H	12.07.11
6	Update Product Compatability Matrix	N			
7	Create Eurocopter Form (FEE)	N			
8	Notify TC / FAA of Change	N			
9					

#	Document Control Actions	Reqd	Resp	Notes	Complete
10	Move Electronic Files/Design Journal	Y	KJ		
11	Update Product Specification Files	N			
12	Update Approved/Preliminary Dwg PDF Files	Y	KJ		12.07.16
13	Update Document Record (DR)	N			
14	Update Product Development Summary	N			
15	Update QSI 021 and/or STC Approval List	N			
16	Create/Update Parts / STC Database	Y	KJ	SEE BELOW.	12.07.16
17	Update / Verify ARC Database	Y	KJ		12.07.16
18	Create / Update Change Record Form / Item Card Database	Y	KJ	SEE BELOW.	
19	Create / Update PPP's	Y	KJ		
20	Red Decals required?	Y	KJ		
21	Update Document Control Database / Laminated Dwgs	N			
22	Update Grey Project / Electronic Binder PDF Files	Y	KJ	WITH ADR AND MDL	
23	Update D-Part/M-Drawing/DSI/DEO Master Binders	Y	KJ		
24					

### Description / Action:

- ADD D3265-043/-7, D3825-043/-3, D3832-7/-9/-11/-13/-15, AND D3833-7 IN SYSTEM;
- REORGANIZE PARTS/BINS IN BASKET CELL;
- REVIEW ALL BOM'S AND W/O'S FOR D350-607-045/-047 BASKETS

### NOTE ABOUT PARTS MUST COMPLY:

- D350-607-041/-043/-045/-047 IN STOCK/PROGRESS ARE ALL OK.
- D3825-041/-1 AND D3836-041/-042 IN STOCK WILL REQUIRE REWORK;

- D350-607-041/-041A NOW @ CHG 009/002 / D350-607-041 AGB @ CHG 002
- D350-607-043/-043A NOW @ CHG 006/002
- D350-607-045/-045A NOW @ CHG 004/002 / D350-607-045 AGB @ CHG 002
- D350-607-047/-047A NOW @ CHG 004/002

ECN Verified & Complete: \_\_\_\_\_

Date: \_\_\_\_\_